

WHAT IS CLAIMED IS:

1. An optical disk apparatus comprising:

a detection unit which detects one information
unit in one of a plurality of areas from an optical
5 disk which stores said plurality of information units
including management information and contents infor-
mation corresponding to the management information in
said plurality of areas;

a reading unit which stores the information unit
10 including the management information and the contents
information in a buffer and performs control in order
to read the information unit from the buffer at
predetermined timing; and

a reproducing unit which decodes and reproduces
15 the contents information read out from the buffer by
control of the reading unit.

2. An optical disk apparatus according to
claim 1, wherein the reading unit includes:

a first control unit which stores the information
20 unit in the buffer according to an address according to
a current reproducing magnification in the management
information, the first control unit writing absence of
the address in a predetermined area of the management
information to store the management information and the
25 contents information in the buffer and standing by
without obtaining the information unit until a start
direction is given when the address of the next

information unit to be obtained is absent; and

a second control unit which reads out the management information and the contents information stored in the buffer, and gives the start direction to the first control unit in order to start to obtain information of the next area in the optical disk when the address is absent in the predetermined area of the management information.

3. An optical disk apparatus according to claim 2, wherein the area is a chapter, the information unit is VOB, and the management information is NV_PCK.

4. An optical disk apparatus according to claim 2, wherein the predetermined area of the management information is a reserve area.

5. An optical disk apparatus according to claim 1, wherein the reading unit includes:

a first control unit which writes a reproducing magnification during detection in a predetermined area of the management information included in the information unit, stores the management information and the contents information in the buffer, and stands by without obtaining the information unit until a start direction is given when the address of the next information unit to be obtained is absent; and

a second control unit which reads out the management information and the contents information stored in the buffer, reads out the reproducing

magnification during detection from the predetermined area of the management information, and gives the start direction to the first control unit in order to start to obtain information of the next area in the optical disk when the address is absent in the predetermined area of the management information.

6. An optical disk apparatus according to claim 5, wherein the area is a chapter, the information unit is VOB, and the management information is NV_PCK.

7. An optical disk apparatus according to claim 5, wherein the predetermined area of the management information is a reserve area.

8. An optical disk apparatus according to claim 1, wherein the reading unit includes:
a first control unit which stores the management information and the contents information included in the information unit in the buffer, the first control unit obtaining the final information unit of the area by using the detection unit, and storing the final information unit of the area in the buffer to stand by without obtaining the information unit until a start direction is given when the address of the next information unit to be obtained is absent; and

a second control unit which reads out the management information and the contents information stored in the buffer, and gives the start direction to the first control unit in order to start to obtain

information of the next area in the optical disk when the address according to one double speed in the management information is absent in the management information.

5 9. An optical disk apparatus according to claim 8, wherein the area is a chapter, the information unit is VOB, and the management information is NV_PCK.

10 10. An optical disk apparatus according to claim 8, wherein the first control unit obtains the address of the final information unit of the area by area management information about said plurality of areas obtained from the optical disk with the detection unit, and the final information unit of the area is
15 information unit of the area by using the detection unit.

 11. An optical disk processing method comprising:
 obtaining one information unit in one of a plurality of areas according to a reproducing direction
20 from an optical disk which stores said plurality of information units including management information and contents information corresponding to the management information in said plurality of areas;

 storing the information unit including the
25 management information and the contents information in a buffer and reading the information unit from the buffer at predetermined timing; and

decoding and reproducing the contents information read out from the buffer.

12. An optical disk processing method according to claim 11, wherein the reading includes:

5 storing the information unit in a buffer according to an address according to a current reproducing magnification in the management information, writing absence of the address in a predetermined area of the management information to store the management information and the contents information in the buffer, and
10 standing by without obtaining the information unit until a start direction is given when the address of the next information unit to be obtained is absent; and
 reading out the management information and the
15 contents information stored in the buffer, and giving the start direction in order to start to obtain information of the next area in the optical disk when the address is absent in the predetermined area of the management information

20 13. An optical disk processing method according to claim 11, wherein the area is a chapter, the information unit is VOB, and the management information is NV_PCK.

25 14. An optical disk processing method according to claim 11, wherein the predetermined area of the management information is a reserve area.

15. An optical disk processing method according to

claim 11, wherein the reading includes:

writing a reproducing magnification during
detection in a predetermined area of the management
information included in the information unit, storing
5 the management information and the contents information
in a buffer, and standing by without obtaining the
information unit until a start direction is given when
the address of the next information unit to be obtained
is absent; and

10 reading out the management information and the
contents information stored in the buffer, reading out
the reproducing magnification during detection from the
predetermined area of the management information, and
giving the start direction in order to start to obtain
15 information of the next area in the optical disk when
the address is absent in the predetermined area of the
management information.

16. An optical disk processing method according to
claim 15, wherein the area is a chapter, the infor-
20 mation unit is VOB, and the management information is
NV_PCK.

17. An optical disk processing method according
to claim 15, wherein the predetermined area of the
management information is a reserve area.

25 18. An optical disk processing method according to
claim 11, wherein the reading includes:

storing the management information and the

contents information included in the information unit
in a buffer, obtaining the final information unit of
the area by using the detection unit, and storing the
final information unit of the area in the buffer to
5 stand by without obtaining the information unit until a
start direction is given when the address of the next
information unit to be obtained is absent; and

reading out the management information and the
contents information stored in the buffer, and giving
10 the start direction in order to start to obtain
information of the next area in the optical disk when
the address according to one double speed in the
management information is absent in the management
information.

15 19. An optical disk processing method according to
claim 18, wherein the area is a chapter, the infor-
mation unit is VOB, and the management information is
NV_PCK.

20 20. An optical disk processing method according to
claim 18, wherein the address of the final information
unit of the area is obtained by area management infor-
mation about said plurality of areas obtained from the
optical disk with the detection unit, and the final
information unit of the area is obtained according to
25 the address of the final information unit of the area.